

Iowa Power Fund Board – Due Diligence Committee (DDC)
Meeting Minutes
March 4, 2008
Iowa Utilities Board, Conference Room 4
350 Maple Street,
Des Moines, Iowa

Call to Order:

Roya Stanley, Chair, called the meeting to order at 1:00 P.M.

Roll Call:

Member	Present	Absent
Franklin Codel	X	
Ted Crosbie	Conf.call	
Vern Gebhart	Conf.call	
Patricia Higby	X	
Fred Hubbell	Conf.call	
William [Curt] Hunter	Conf.call	
Roya Stanley, nonvoting	X	
IEC Representative		X

- Also in attendance: OEI staff: Jennifer Wright, Michelle Bauer, and Brian Crowe (Recording Secretary); Governor's Office: Deborah Svec-Carstens (associate general counsel, Governor's Office)

Approval of Agenda:

Director Stanley requested that agenda be approved. Mr. Gebhart moved, Mr. Hunter seconded, to approve the agenda. All members in attendance voted "aye".

Approval of Minutes:

Mr. Hunter moved, Mr. Gebhart seconded, that the Minutes of the February 27, 2008 meeting be approved as written. Committee members would like more time to discuss given that not all members had an opportunity to review the distributed minutes. Approval of minutes tabled until March 11th.

Committee Comments

Ms. Higby would like the committee to offer constructive feedback to applicants.

Mr. Codel would like to identify ways to provide assistance to private sector organizations.

OEI staff and Mr. Codel had a meeting on 3/2/08 with USDA Rural Development regarding loan guarantees to help improve impact of Power Fund dollars. Ms. Stanley suggests that we could do a "true-up" as the process evolves to make sure that all applicants are given a fair evaluation.

Ms. Higby suggests we wait until 3/11/08 to do "true-up" on applications. Other members suggest we wait to review loan options to develop feedback for proposals at pre-application phase.

1025: Potential Use of Biofuels Co-Products - this project is proposing research within the ethanol industry to identify biofuel co-products in food applications which could be accomplished by a market survey to assess and quantify new ethanol products.

The following comments were made:

- Essentially a market survey for the ethanol industry.
- Would the survey be made public?
- There are no matching funds identified in the application. Perhaps ethanol producers and food companies should provide matching funds or be more engaged in the project?

- If the industry was more involved the project, the due diligence committee would be more comfortable with the project and be more assured that this is something that the ethanol industry would desire.

Yes- none

Yes, if- none

No but- Codel, Crosbie

No- Gebhart, Higby, Hunter

1026: Distiller's Grain Research Proposal- this project proposes to research how to increase understanding of the relationship between the quality of distiller's grains and the acceptance of feeding distillers grains to all livestock.

The following comments were made:

- Project specifies working with a single ethanol plant to analyze the DDG output rather than several plants. Why not increase the sampling size of the project?
- If the applicants' hypothesis is correct, this process would need to be done at all ethanol plants, and it is unclear if this would receive universal implementation.
- A fair amount of this analysis has already been undertaken in this field.
- Uncertainty about the innovation and replication of this work.

Yes- none

Yes, if- none

No but- Crosbie

No- Codel, Gebhart, Higby, Hunter

1027: Standardizing the Carbon Credit Industry – this proposal deals with standardizing the carbon credit industry.

The following comments were made:

- There are some groups that have already undertaken efforts to standardize the carbon credit industry and it is unclear the members if this organization has the authority to standardize the carbon credit industry.
- This could be a stronger proposal if partnerships are sought with groups that are already involved in the carbon credit industry.
- Not sure if Power Fund would have much impact.
- The group needs to work with the proper Federal agencies working on this issue.
- Project needs to include individuals with more expertise and credentials in carbon sequestration

Yes-none

Yes, if- none

No but-none

No- Codel, Crosbie, Gebhart, Higby, Hunter

1031: Optimizing Iowa Crops – this proposal deals with creating a center that would support world class biotechnology programs which could analyze Iowa crops to measure food and energy potential.

The following comments were made:

- Even if the Power Fund provided money for a center, it is not clear who funds the ongoing cost to operate and run the center.
- Center's like this should be funded by the Board of Regents or be funded through the Federal Center's of Excellence program.
- Analytical services and research exists today, however, this project would be more interesting if industry giants signed on and qualify the need for this center.
- This proposal limits the crops to be analyzed, there could be more crops analyzed by a center like this and why is this not identified in this proposal?

Yes-none

Yes, if- none

No but- Codel, Crosbie, Hunter

No- Gebhart, Higby

1032: Transforming Iowa to Feedstock Ready – This project proposes to study how to get Iowa biomass ready and will aid in the research of harvest, storage, and transportation of agricultural products._

The following comments were made:

- Broad proposal with lofty goals.
- Proposal needs to be paired down, and perhaps study one or two of the limiting factors in biomass transportation.
- There needs to be more match and more participation from companies that are already involved in studying this area.
- How will the findings be deployed and how will these findings and recommendations be put into action?
- Much of the work is done as plants are sited.
- Private sector is doing much of this work already.

Yes-none

Yes, if- none

No but-Crosbie

No-, Codel, Gebhart, Higby, Hunter

1041: Production of Biomass with Mixture of Prairie Species - this proposal deals with how to use prairies for wildlife cover and energy production.

The following comments were made:

- This is something that all Iowans should consider, could be a landmark study.
- Should include a baseline check with a corn hybrid check, as hybrid changes year to year
- There are many staff expenses in the request and it would be preferred if the Power Fund would cover direct expenses only.
- This is a potential project for DOE.
- This is a project that the Legislature has endorsed.
- The results of the project are likely to be well distributed.
- If climate change models are correct, and Iowa receives more rain, than prairie grass is optimal instead of row plants.
- This study should be studied over three years the project will need multiple years of funding.

Yes- Crosbie, Codel, Higby, Hubbell, Gebhart

Yes, if- Hunter

No but-none

No- none

Full Research and Development Application request.

1024: Reaction Kinetics and Dynamics – this is a request to use specialized equipment and chemical bi-products to improve efficiency and reduce green house gases in a combustion engine.

The following comments were made:

- Not sure why there was no matching funds from industry (e.g. auto, fuel).
- Matching funds could be asked for in the full proposal.
- Most of the funding is for equipment and should come from the Regent's budget.
- Regents do not really fund new equipment with budget cuts.
- Will the study be adopted by the industry once it has been conducted?
- This could be construed as basic research.
- Should the Power Fund be used for basic research?
- Is the fuel and automotive industry already doing this research?
- There could be patents already covering these areas, patent review is necessary.
- How does this work fit into the work that California Air Resource Board (CARB) is doing.

Yes- none

Yes, if- Higby
No but- Codel, Hunter
No- Crosbie, Gebhart, Hubbell

1028: General Mills Biomass Boiler - this proposal will add equipment to collect and use clean biomass in their manufacturing process.

The following comments were made:

- The reductions in green house gas emissions and the energy cost reductions are significant and impressive with this type of technology.
- The application states the project does not meet their internal guidelines for investment (hurdle rate) without a \$4 million dollar grant from the Power Fund.
- General Mills is a large enough company with significant profits that they could “Go Green” without funding from the Power Fund
- Might be a good investment if this proves the technology at a large scale.
- Could be interested in seeing an application from Frontline.
- Could be more interested in project if the Fund loaned the money instead of granting funds to General Mills.

Yes- none
Yes, if- Higby, Hubbell
No but-0,
No- Codel, Crosbie, Hunter, Gebhart

1029: RIN Alliance PCMI - this applicant proposes to develop a web-based compliance tool for biofuel marketers and blenders. This tool would track data on renewable fuels for the EPA and would ease compliance regulations for petroleum marketers.

The following comments were made:

- Budget needs to be better defined.
- Technology would be taken to other states to continue to allow for continued biofuels sales.
- Will the EPA establish an on-line reporting?
- Will the retailers be doing the same auditing with a tax return?
- Does the trade group own the IP, or would it be public information.
- Loan could be considered rather than a grant.
- Can be considered a cost of doing business.
- Clarity would be needed on what is funded on the technology developed, and what is still to be developed.

Yes-none
Yes, if- Higby, Hubbell
No but-none
No- Codel, Crosbie, Gebhart, Hunter

1030: Luther EE and RE Production - the proposal is requesting funding for five feasibility studies on renewable energy and energy efficiency for Luther College.

The following comments were made:

- Gives the committee the opportunity to decide whether or not to fund feasibility studies and to what level.
- Assuming the studies are done and recommendations are made, how will Luther College pay to implement the recommendations?
- Would the college pay for the improvements, through financing?
- Possibility that the DNR Energy Bank program could fund the study and financing.
- Local communities could issue on behalf of private college.
- There are 29 private colleges in Iowa, could the studies be replicated and shared with the other private colleges?
- Technology is relatively well known. Engineering analysis is pretty standard.
- Money could be loaned.

Yes- none

Yes, if- Higby

No but- none

No- Codel, Crosbie, Gebhart, Hubbell, Hunter

1034: E-Tec, Energy Technology Education Challenge - this proposal would create an education program at William Penn University that provides research opportunities in energy management and green technologies within their Industrial technology program. In addition, the proposal also identifies the creation of an educational kiosk which would allow visitors to observe energy efficiency aspects of an energy education center, the wind generator that powers the center and alternative energy workshop for science teachers.

The following comments were made:

- Interesting demonstration model.
- Almost identical to kiosk demonstration in Iowa Power Fund Pre-Application#1071 (University of Iowa proposal).
- AERLP could be a source of funding.
- Similar education and curriculum program already exists at UNI, does the committee want to expand these types of education programs across the state.
- Curriculum seems expensive to develop.
- Possible to fund educational components-wind turbine, solar array, and kiosk but not the time to develop curriculum.

Yes- none

Yes, if- none

No but- Gebhart, Higby, Hubbell, Hunter

No- Codel

1035: Expanding Iowa's Renewable Energy Market - this proposal from I-Renew introduces individuals to energy efficiency and renewable energy through energy fairs and seminars.

The following comments were made:

- Question of long term viability if the fund is primarily funding salaries.
- The group is having an impact over the long term with many individuals.
- Grassroots organization focused on small technology and what small businesses and individuals, they do great work and if we invest in non-profits, this is the one to invest in.
- There is a place for educational programs like this, but how does this program allow for people to make changes very easily.
- The committee needs to decide how to handle all energy efficiency proposals in the "true-up" phase since there are many applications focused on energy efficiency.
- The programming may be a bit too general needs to be more specific.
- Good match in this proposal, but could be better.
- Committee needs to discuss what the best match level is for education projects.

Yes- none

Yes, if- none

No but- Codel, Gebhart, Hubbell, Hunter

No-none

Abstained-Higby

1036: Maharishi Vedic City-Renewable Energy Park - this is proposal is to provide power for the newest city in Iowa and they plan for this to be a research project and training facility for the city.

The following comments were made:

- They are in Alliant's territory, but they are trying to exist off of the grid
- A feasibility study would be necessary.
- Committee may want to see if the applicant would consider a loan.
- Committee would ask them to inquire with AERLP.
- Excellent project manager for this proposal.
- Alliant is assisting the city with energy efficiency programs.
- City is in a low wind area so wind energy does not typically work in this area.

- Interesting

Yes- none

Yes, if- Higby

No but- none

No- Codel, Gebhart, Hubbell, Hunter

1037: Limestone Drying- this proposal by ILC Resources seeks funding to improve efficiency of drying limestone that could be applicable to grain drying.

The following comments were made:

- The proposal is not asking for a lot of money and there is good match to the request.
- Payback for the investment is less than 3 years, may not need the money if the payback is so good.
- May not be replicable to other activities in the state, but would need clarification to determine if it could serve additional industries.
- Committee may like to see a bit more detail about the technology in the pre-application.

Yes-none

Yes, if- none

No but- Codel, Higby, Hunter

No-Gebhart, Hubbell

1039: Whole Town Energy Audit - this proposal by IAMU seeks to identify and price as many energy efficiency options as possible in a sample of member communities. They believe the project will show the limiting factors for implementing energy efficiency programs in Iowa's small, rural communities.

The following comments were made:

- Lower bills in small municipalities results in or lower funding for energy efficiency in these areas.
- Program calls for the development of a "shopping list" for energy efficiency proposal.
- Cost of energy efficiency programs are in the Investor Owned Utility company rates, this will not be the case if the Governor's energy efficiency bill passes.
- Committee agreed that the project could be put on-hold until there is action on the Governor's bill.
- Maybe harder to achieve energy efficiency in small towns because of lower income demographic and the number of households that access LIHEAP (Low Income Heating and Energy Assistance Program).

Yes-Higby

Yes, if- Hubbell

No but- Codel, Gebhart, Hunter

No- none

1040: Mobile Solid Biomass Briquette Plant – the application by RENEW Energy Systems is a proposal that requests funding to implement its expansion plans and purchase equipment- two mobile briquette presses and a biomass dryer. The biowaste briquettes produced by RENEW can then be burned in existing stoker coal fired boilers.

The following comments were made:

- The company would be unique nationally.
- Do we want to fund a private business for the company to become profitable?
- Why can't the applicant get private capital or a loan to secure equipment?
- Do not think that there is a limit to the market, although new boilers are being designed for smaller pellets.
- They do not have a firm funding source, but they do have potential funding.
- A loan guarantee might be a good opportunity because it is an emerging technology.
- It is unclear if the company has any equity, in a full proposal they would really need to clearly identify financial situation.
- What is the environmental impact and how much does the footprint change if these pellets are used in boilers?
- Loan guarantee would be the only funding option.
- Market study would be necessary

Yes-

Yes, if- Codel, Crosbie, Gebhart, Higby, Hubbell, Hunter

No but- none

No-none

1042: Iowa Lakes: Expanding Employee Pool - this is a proposal that seeks to develop Iowa's workforce in renewable fuels and wind industry.

The following comments were made:

- There is Power Fund money already allocated through Iowa Department of Economic Development (IDED) for this type of project
- The Committee could decide to fund more than the \$2.5 million IDDED carve out.
- The program is being offered in several different community colleges throughout the state.
- Office of Energy Independence will sit down with IDDED to further develop and understanding of IDDED processes and their expectations of the applications that are from Iowa Community Colleges.
- The OEI will send all community college pre-applications to IDDED and the Due Diligence will review once IDDED has made a decision.

TABLED.

1044: Indian Hills- Ethanol Pilot Plant

TABLED.

Yes- none

Yes, if- none

No but- none

No- none

1043: Green Plains Renewable Energy Inc.: Algae Project - this proposal is a multi phase algae development project to produce oil for biofuels.

- Phase 1 is pure research and development.
- The proposal could be a bit risky at this early stage.
- Is the technology public information, how replicable would the project be?
- Technology review would be necessary
- There should be a cellulosic feedstock for this technology and this would be another market for cellulosic feedstock.
- More cost share could help to lessen risk in the investment.
- Great long term, high-risk investment. If the technology works, it would transform the industry.
- Technology would need to be available to competitors. Tours of the facility would need to be available.

Yes- none

Yes, if- Codel, Crosbie, Gebhart, Higby, Hubbell, Hunter

No but- none

No-none

1045: POET Project Liberty - this proposal deals with developing a large scale cellulosic ethanol from corn fiber and corn cob plant in Emmetsburg, IA.

The following comments were made:

- How open is the technology, will it be made public.
- There is a perception that it may be an environmental issue if corn cobs are removed from the farm fields. However, that is not a study or belief that held by all members of the committee
- DOE has made an award to POET and it was conveyed to the committee that DOE thoroughly vetted the technology before making an award.
- Committee members questioned whether the project will go forward even without power fund money.
- Smaller amount and in a loan or a loan guarantee
- Check with IDDED to see if they have a proposal pending from POET

Yes- none

Yes, if- Codel, Crosbie, Gebhart, Hubbell, Hunter

No but-

No- Higby

1047: Kraft Foods Renewable Energy Center- this proposal is to build an energy park with a wind turbine, and a gasifier to demonstrate how industrial consumers can reduce their energy usage and make a difference environmentally.

The following comments were made:

- The project would save the company money and shows a quick payback on the biomass gasifier. The payback timeline on the wind turbine is reasonably quick and shows that this is financeable.
- This is something a private company should want to do.
- Like the trash gasifier.
- Loan rather than a grant.

Yes- none

Yes, if- Higby

No but- none

No- Codel, Crosbie, Gebhart, Hubbell, Hunter

1048: Michael Foods Renewable Industrial Park - this project seeks to develop a renewable energy complex with a biomass gasifier and a wind turbine. The company intends to utilize their waste (specifically poultry manure, egg waste, cardboard, etc) as fuel source.

The following comments were made:

- Mirrors the previous project
- Private companies should fund this type of project.
- Like the trash gasifier.
- Loan instead of a grant.

Yes- none

Yes, if- Higby

No but- none

No- Codel, Crosbie, Gebhart, Hubbell, Hunter

1049: Montezuma Light and Power - this project seeks to purchase a wind turbine for a local utility, and use this as an educational tool as well.

- Could be funding from AERLP.
- Would have ability to borrow for this type of equipment.

Yes- none

Yes, if- none

No but- none

No- Codel, Crosbie, Gebhart, Higby, Hubbell, Hunter

1050: Pine Lakes Corn Fractionation – this project seeks to implement a fractionation process which extracts the oil from corn before the ethanol process. This would create a second feedstock for biofuels.

The following comments were made:

- This project is not necessarily state of the art, and the technology already exists in Iowa.
- The project seems to have a quick payback and should finance itself.
- The technology needs to be replicable and open information to others.
- There is not a clear definition of the intended use of funds from the Power Fund.
- The technology is being implemented by many different companies.
- What is DED doing to support this technology?
- Project could fall into a loan or loan guarantee category.

Yes- none

Yes, if- none

No but- Codel, Crosbie, Hubbell

No- Gebhart, Higby, Hunter

Other Business

None.

Adjournment:

There being no further business to discuss at this time, the meeting adjourned at about 4:52 P.M. It was indicated the next meeting would be Tuesday, March 11th at IUB.

Roya Stanley, Committee Chair

Brian Crowe, Recording Secretary

Date